



Unleashing Creativity through Assessment

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A photograph of a classroom where several students are seated at desks, working on laptops. The focus is on a student in the foreground, seen from the side, wearing a grey sweater with blue stripes on the sleeves, typing on a laptop. The laptop screen displays a 3D game environment. Other students are visible in the background, also working on laptops. The text 'Whose learning?' is overlaid in large white letters across the top half of the image.

Whose learning?

‘validating and authorising them to represent their own ideas, opinions, knowledge and experiences throughout education in order to improve our schools’ (Fletcher 2005).




Workshop Objectives

- To identify and share effective assessment strategies to foster creativity
- To identify and share ways to use technology to enrich assessment, and unleash creativity

A close-up photograph of a target with concentric rings of black, blue, red, and yellow. Several arrows with orange and yellow fletching are embedded in the target, with one arrow hitting the center bullseye. The background is a soft-focus green.

*“We have to know
where we want to end
up before we start out
– and plan how to get
there ...”*


(1999, Tomlinson).

- 
- *“The quality of teaching and learning provision are by far the most salient influences on students’ cognitive, affective, and behavioral outcomes of schooling – regardless of their gender or backgrounds” (Rowe, 2003).*
 - *‘Quality assessment has the greatest potential to improve the learning outcomes of all pupils’ (Hattie, 2003; Dinham, 2009).*

*'If we teach today's
students as we taught
yesterday's, we rob them
of tomorrow'* John

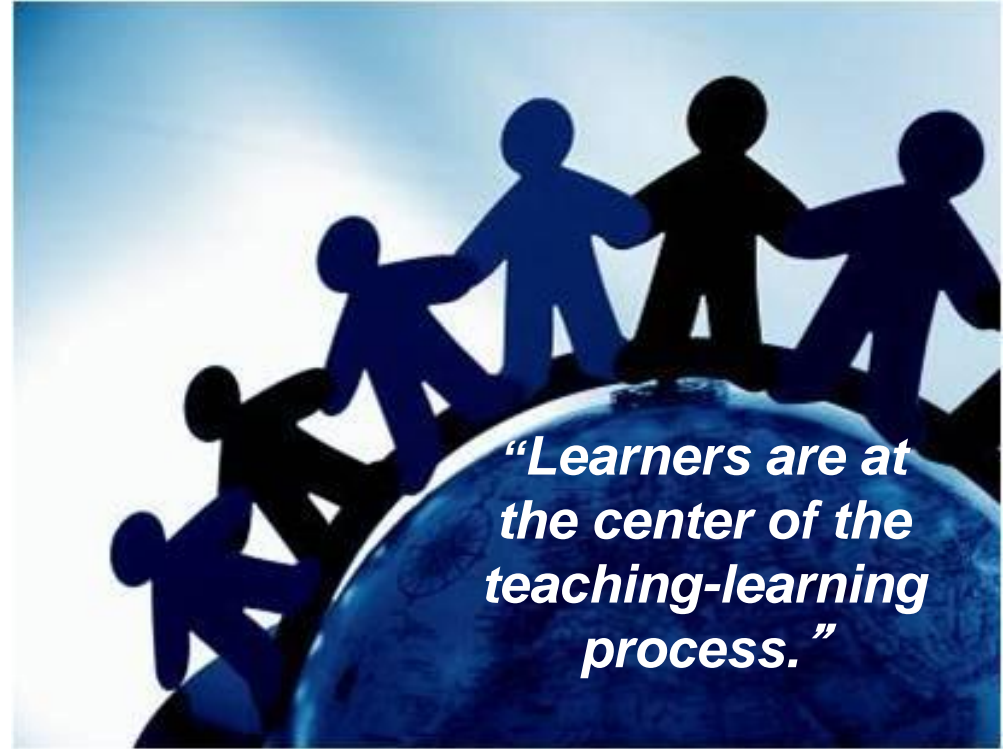
Dewey,
1859-1952.

The Research

- Coyle and Colvin (1999): The brain is phenomenally plastic– *'It's not who you are, it's what you do and where you do it.'*
 - Schools (Robinson, 2006) and educators (Malaguzzi, 1987) kill creativity.
 - Barab et al (2001), Shaffer (2006) and Gee (2007) creating using technology encourages students to be creative, autonomous, and cognitively flexible risk takers.
 - Westwell (2009): Creativity flourishes when connected to what is already known.
 - Wiggins and McTighe (2006), Hattie (2003) & Dinham (2008): Correlation between quality assessment and improved learning outcomes.
- 
- ❖ Create a positive learning environment for creativity, critical thinking, problem–solving and risk-taking
 - ❖ High expectations
 - ❖ Build the field
 - ❖ Interplay of quality assessment *for, of, as and through* learning
 - ❖ Student choice
 - ❖ Provide quality feedforward

Global Skills

- Critical thinking
- Communication
- Problem solving
- Creativity and innovation
- Collaboration
- Connectivism
- Global and cultural knowledge



A scenic landscape featuring a two-lane asphalt road that curves through rolling hills. The hills are covered in dry, golden-brown grass. In the background, there are dark, silhouetted mountains under a bright blue sky filled with large, white, fluffy clouds. The overall mood is open and expansive.

Uncovering the Learning

Uncovering Learning

- What do I my students need and want to learn?
- Why does it matter?
- What do they already know?
- How will they demonstrate learning?
- How will they get there?
- How well do I expect them to do it?
- How will technology enrich the learning?

Over to you...

Focus on a current assessment task:

- What do you want the students to learn? – one statement that captures the essential learning
- Why does this matter?



Deep learning: Identification of concept, skills, knowledge and understanding to be assessed



Essential learning goal & key learning ideas



Precision: Data & pre-assessment



Targeted assessment

Formative (A4L & AasL)



Summative



Peer/Self assessment and reflection

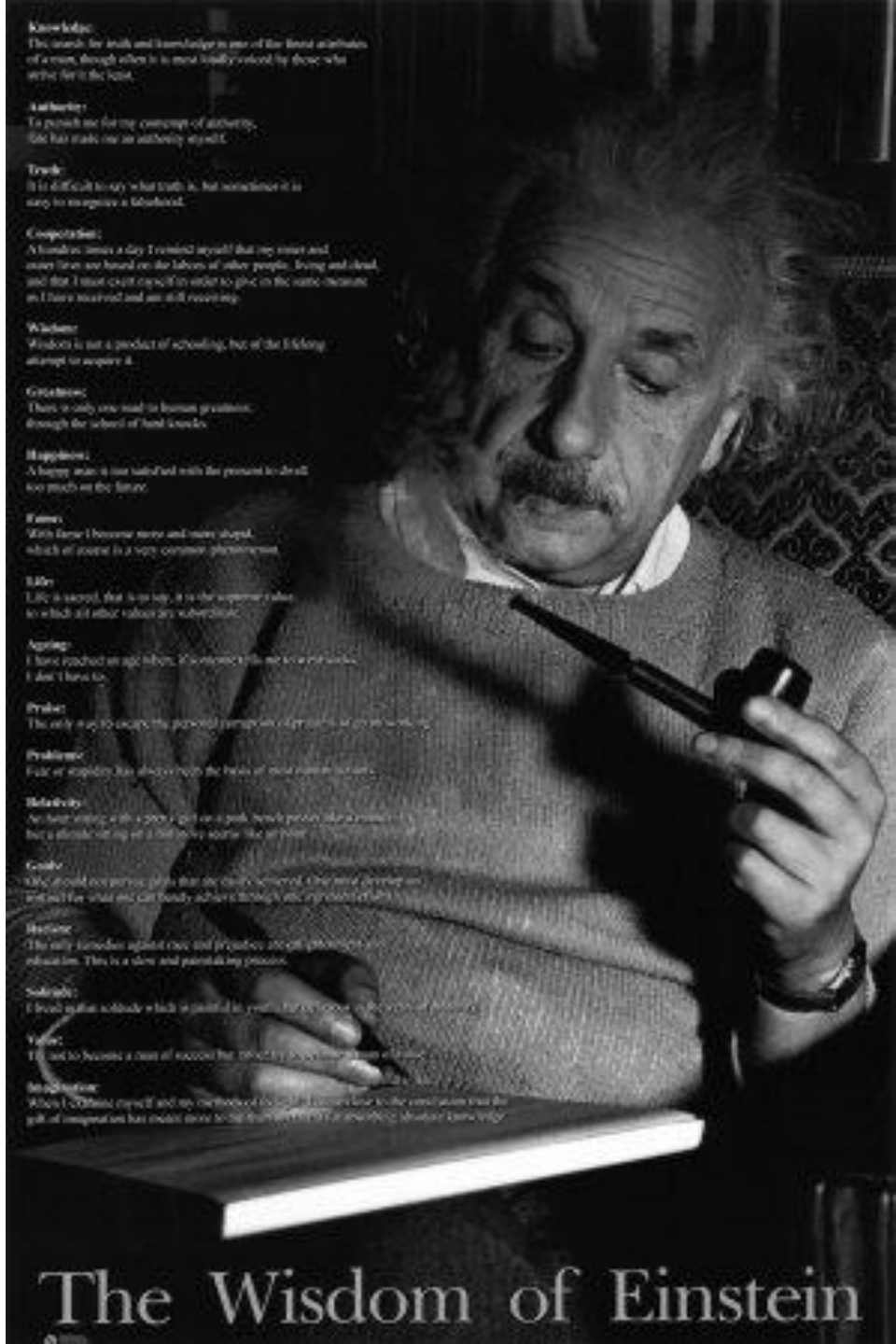


Timely and precise *feed-forward*

Pre-Assessment

What do they already know?

- The importance of building on prior knowledge
- Unless new knowledge becomes integrated with the learner's prior knowledge and understanding, this new knowledge remains isolated, cannot be used effectively in new tasks, and does not transfer readily to new situations.



The Wisdom of Einstein

Summative Assessment

- **Assessment *of* learning** is assessment for accountability purposes, to determine a student's level of performance on a specific task or at the conclusion of a unit of teaching and learning.
- It can be a powerful diagnostic tool to inform and improve language learning with precision.



Assessment *for* Learning

TRADITIONAL/SUMMATIVE	AUTHENTIC/FORMATIVE
CONTRIVED	REAL-LIFE
RECALL/RECOGNITION	CONSTRUCTION/APPLICATION
TEACHER DIRECTED	STUDENT DIRECTED
COVERAGE	UN-COVERAGE
SELECTING A RESPONSE	PRODUCING/PERFORMING/ PRESENTING
PASSIVE LEARNING	ACTIVE LEARNING/SELF- ASSESSMENT/METACOGNITION
STRUCTURED	OPEN-ENDED

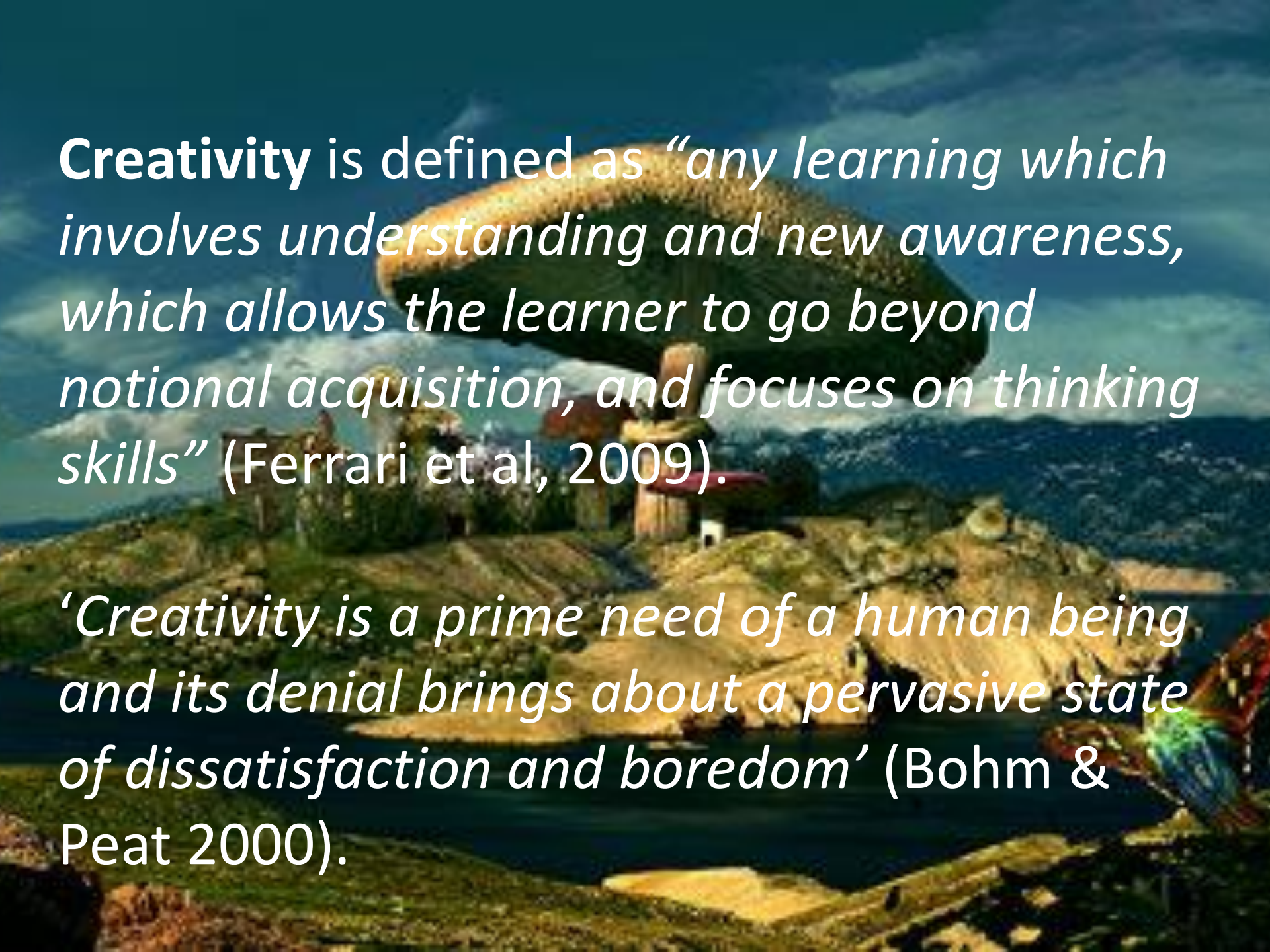
Wiggins (2006)

Assessment *as* Learning

- Students and teachers set learning goals, share learning intentions and success criteria, and evaluate their learning through dialogue and self and peer assessment.
- Students gain a deeper understanding of their skills, knowledge, level of understanding and the expected standards.
- Students develop ownership of the learning process.

WHAT MATTERS MOST
IS HOW YOU SEE YOURSELF.



A surreal landscape featuring a giant mushroom house with a red roof and a chimney, situated on a grassy hill. The background shows a body of water and distant mountains under a cloudy sky. The text is overlaid on the upper left portion of the image.

Creativity is defined as “any learning which involves understanding and new awareness, which allows the learner to go beyond notional acquisition, and focuses on thinking skills” (Ferrari et al, 2009).

‘Creativity is a prime need of a human being and its denial brings about a pervasive state of dissatisfaction and boredom’ (Bohm & Peat 2000).

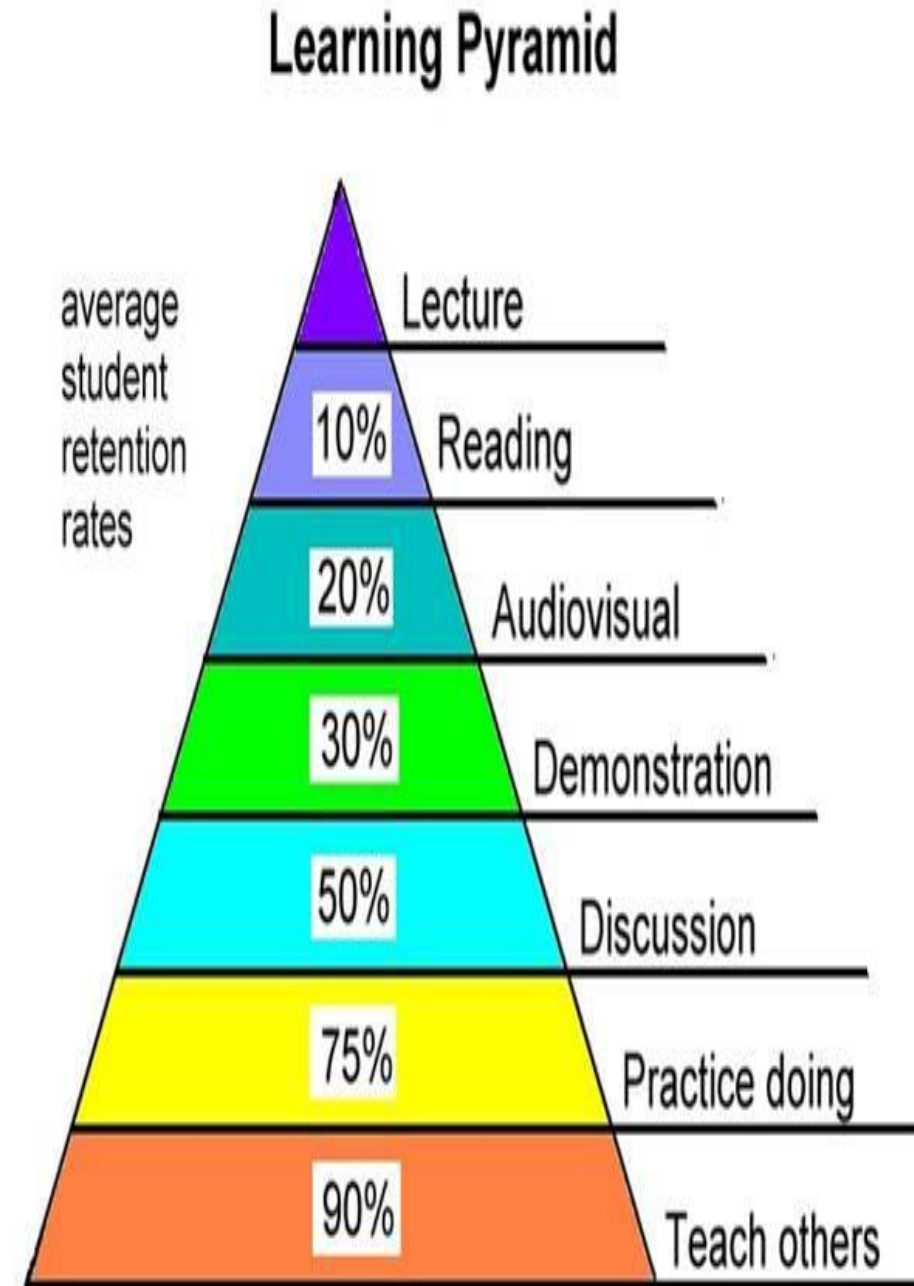
Unleash Creativity

- Authentic assessment that uncovers the learning
- Planned deliberately and integral to the design of teaching
- Explicit teaching builds confidence
- Supported by models, scaffolds or annotated exemplars
- High expectations
- Risk-taking encouraged
- Student-centered
- Choice encouraged through technology
- Time for reflection and refinement with peers and self



Higher-order Tasks

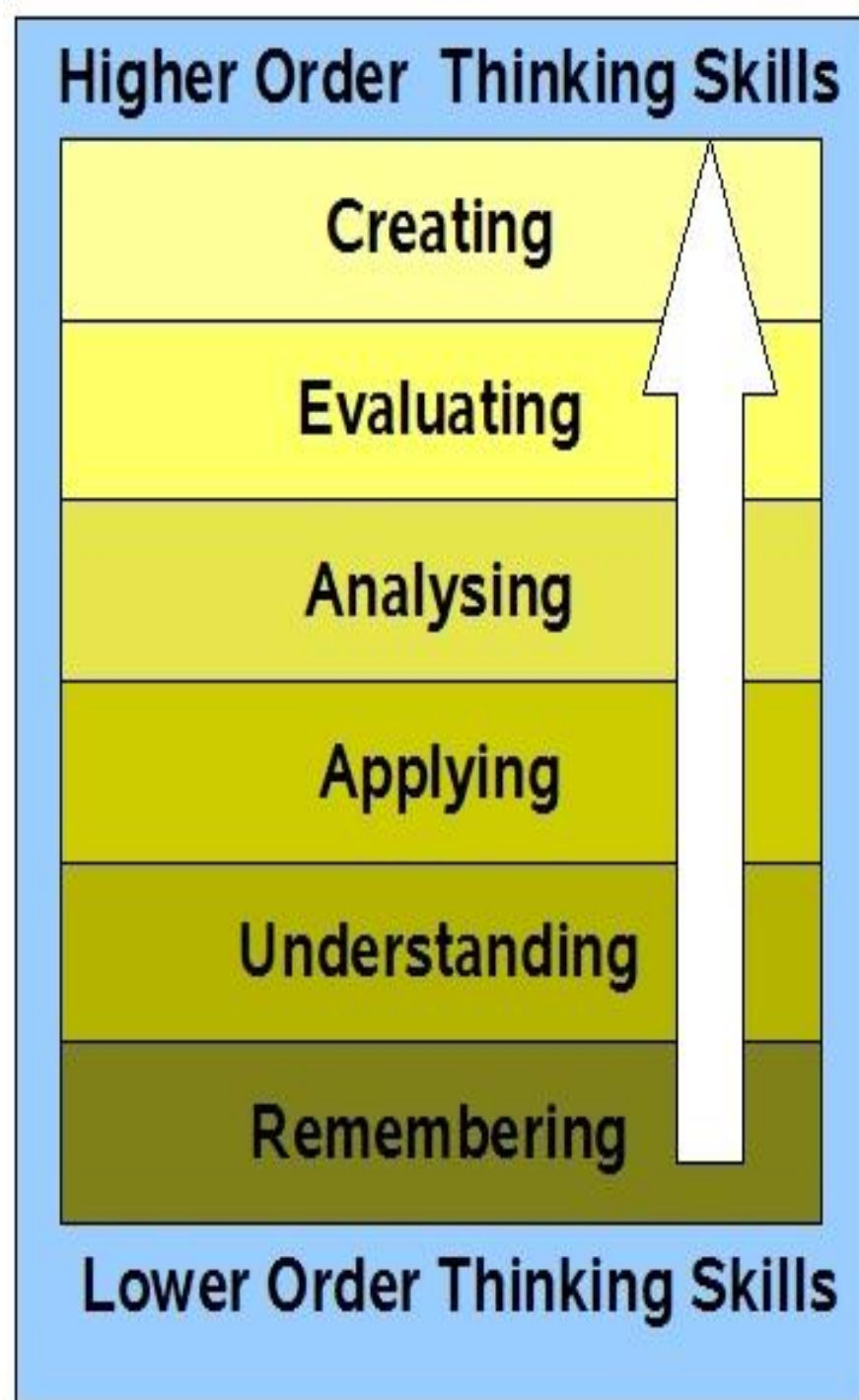
- Investigation
- Critical thinking
- Active learning
- Collaborating and sharing
- Problem solving
- **Teaching others**
- Evaluating and reflecting



Source: National Training Laboratories, Bethel, Maine

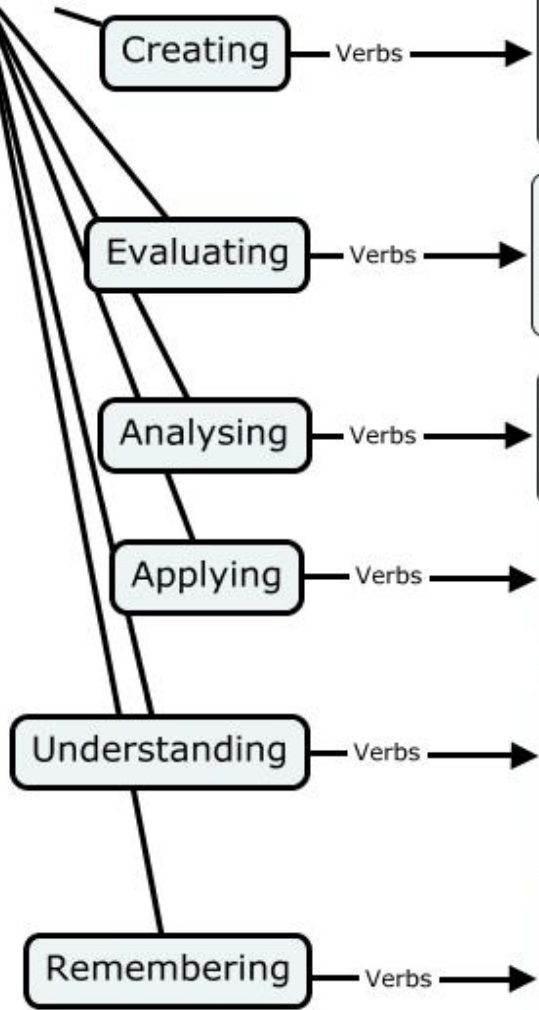
The Verbs

- Blooms revised taxonomy of knowledge (Anderson & Krathwohl, 2001)
- Build the demands and higher-order expectations of the task by changing the verbs.
- Apply, explain, evaluate, create, synthesise...



Bloom's Digital Taxonomy

Key Terms



HOTS Higher Order Thinking Skills

Designing, constructing, planning, producing, inventing, devising, making, programming, filming, animating, blogging video blogging, mixing, re-mixing, wiki-ing, publishing, videocasting, podcasting, directing, broadcasting

Checking, hypothesising, critiquing, Experimenting, judging, testing, Detecting, Monitoring, blog commenting, reviewing, posting, moderating, collaborating, networking, refactoring, testing.

Comparing, organising, deconstructing Attributing, outlining, finding, structuring, integrating, mashing, linking, validating, reverse engineering, cracking, media clipping

Implementing, carrying out, using, executing, running, loading, playing operating, hacking, uploading, sharing, editing

Interpreting, Summarising, inferring, paraphrasing, classifying, comparing, explaining, exemplifying, advanced searches, Boolean searches, blog journaling, twittering, categorising, tagging, commenting, annotating subscribing.

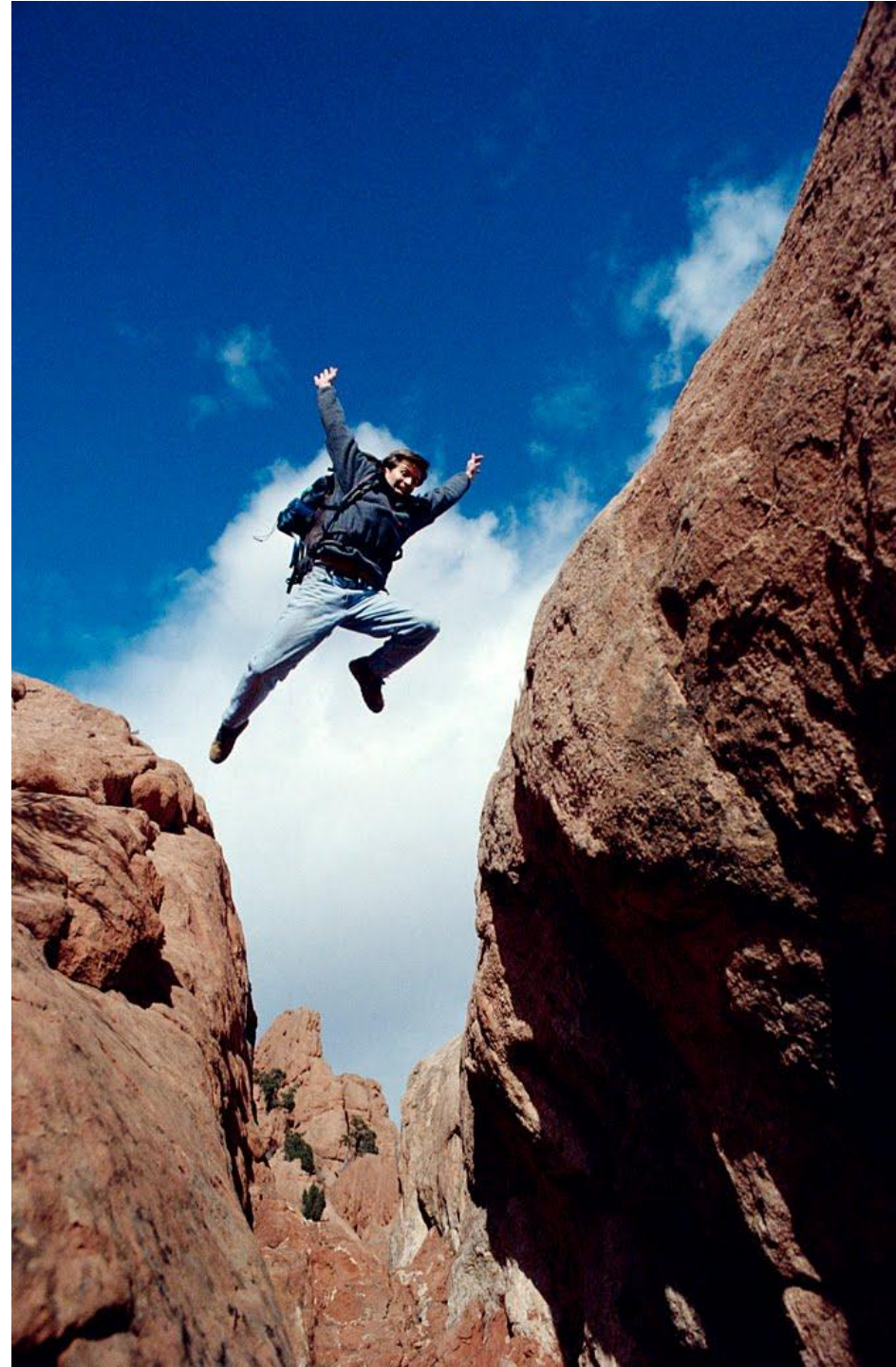
Recognising, Listing, Describing, Identifying, Retrieving, Naming, Locating, Finding, bullet pointing, highlighting bookmarking, social networking, social bookmarking, favouriting/local bookmarking, searching, googling.

LOTS Lower Order Thinking Skills

- COMMUNICATION SPECTRUM**
- Collaborating
 - Moderating
 - Negotiating
 - Debating
 - Commenting
 - Net meeting
 - Skyping
 - video conferencing
 - Reviewing
 - Questioning
 - Replying
 - Posting & Blogging
 - Networking
 - Contributing
 - Chatting
 - e-mailing
 - Twittering/Microblogging
 - Instant messaging
 - Texting

Risk Taking

- Personalisation and differentiation
- Moving towards student directed and open ended
- Move to students designing own tasks
- A wide range of choices – even a free choice negotiated with the teacher!



Learning Objects

- Students creating objects to teach others:
 - Quizzes in ***Captivate or Presenter***
 - Cartoons in <http://goanimate.com/>
 - Summaries, research in ***OneNote***
 - Mind maps in ***Freemind***
 - Presentations in ***Prezi***: <http://prezi.com/>
 - Podcasts in ***Audacity*** or ***Soundbooth***
 - Webquests: <http://www.schools.ash.org.au/paa2/>





Creating and Producing

Creating and Producing

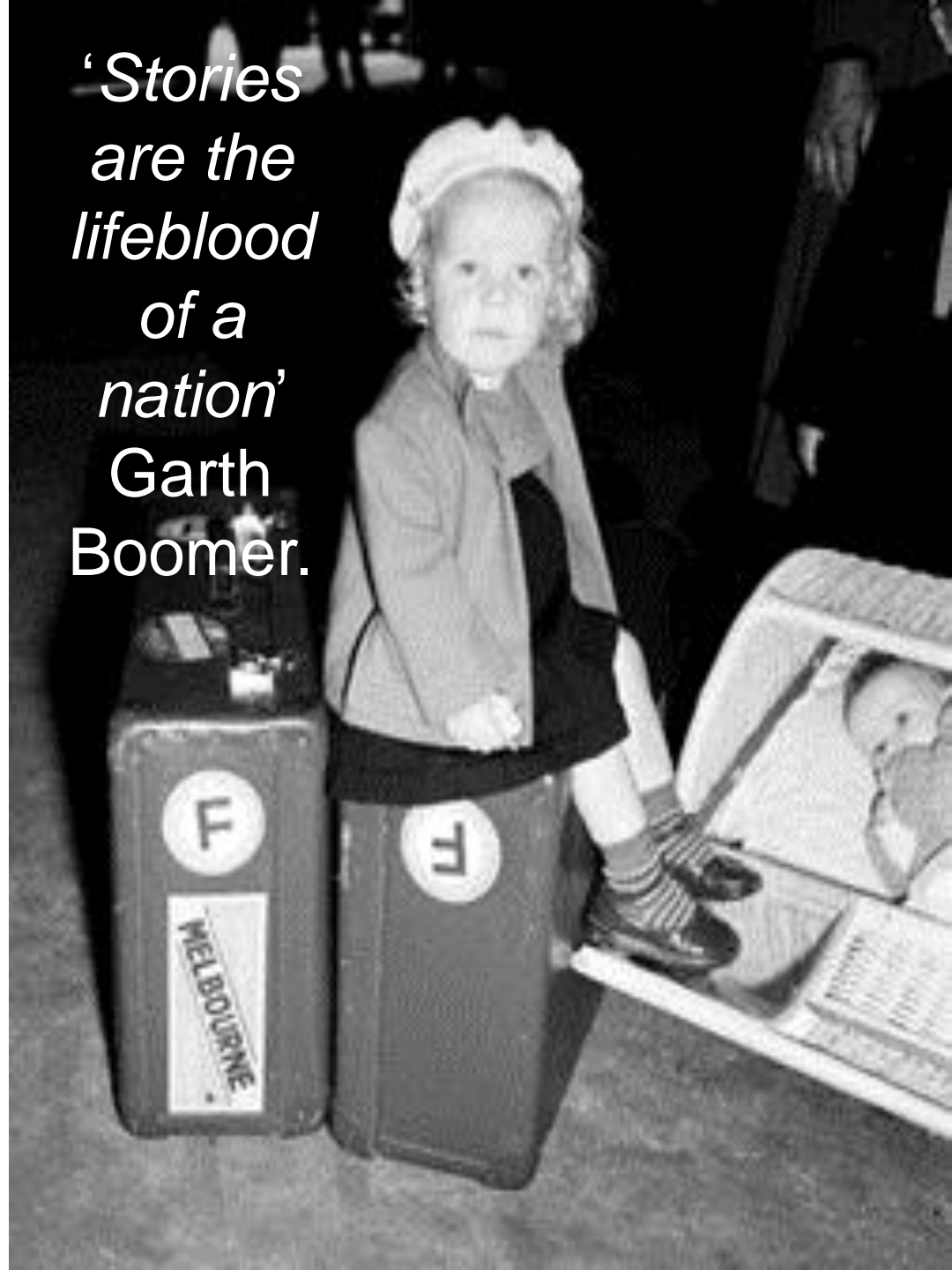
- Differentiates assessment
- Student choice
- Medium of production
- Learning objects
- Fosters creativity and risk taking
- Collaboration
- Evaluation



Digital Texts

- A digital timeline:
<http://www.dipity.com/>
- [A narrative](#)
- Creative non-fiction
- <http://celtx.com/>
- E-postcards
- A character's blog or Facebook
- A persuasive podcast
- Choose your own adventure
- Alternative perspectives
- A soundscape
- A digital poem
- A travel tale: Google Earth

*'Stories
are the
lifeblood
of a
nation'*
Garth
Boomer.



Digital Texts

- **Google Lit Trip:** Create a unique Lit Trip for an original story, play or poem - <http://www.googlelittrips.org/>
- **Play/Film script:** <http://celtx.com/>
- **Museum Box:**
<http://museumbox.e2bn.org/>
- **Celestia:** students explore the universe in three dimensions - travel throughout the solar system - <http://www.shatters.net/celestia/>
- **Fakebook:**
<http://classtools.net/fb/home/page>
- **Book Trailers:**
<http://www.brainpickings.org/index.php/2011/04/29/7-brilliant-book-trailers/>



Digi-texts

History

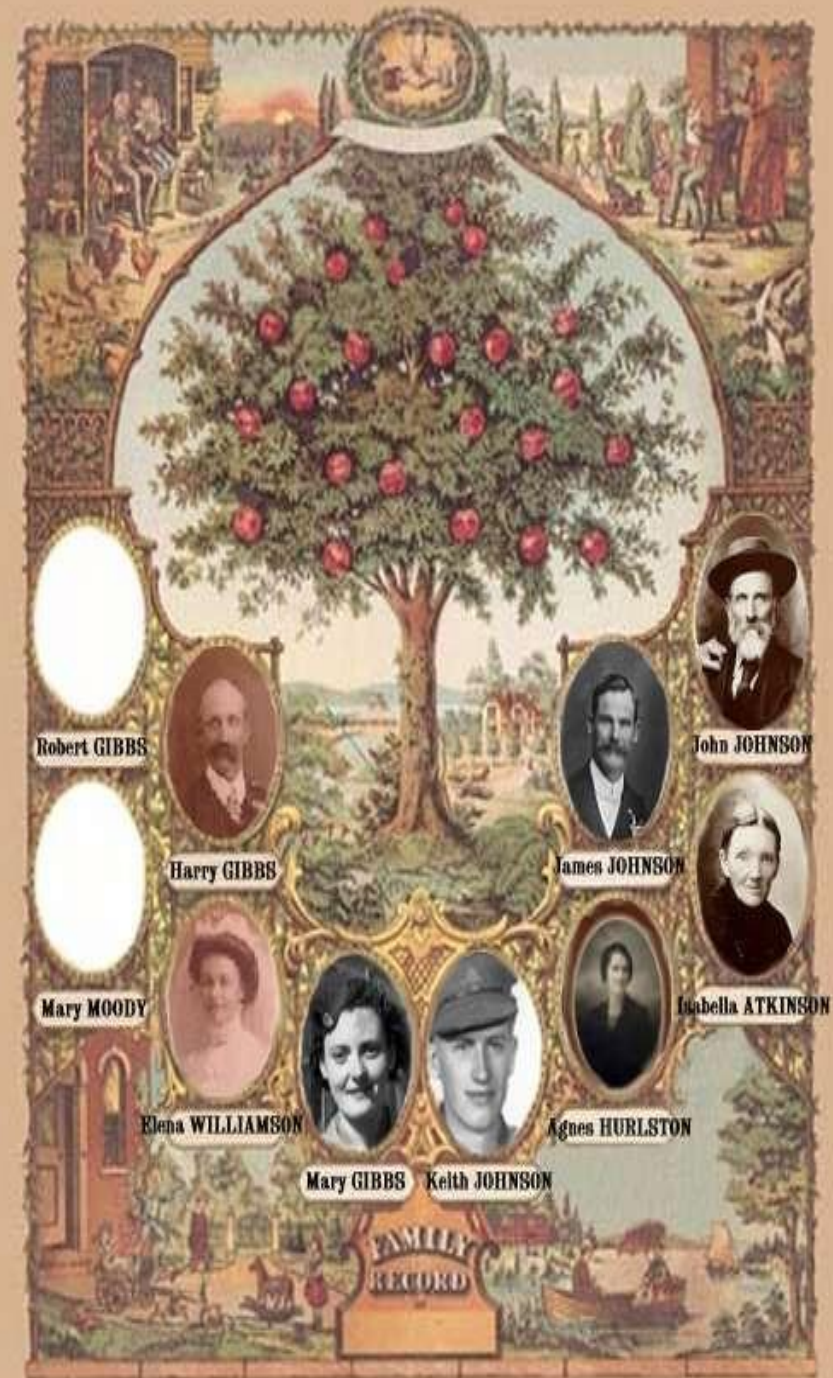
Concept: Heritage

■ Key Ideas:

1. The power of stories to convey the importance of heritage.

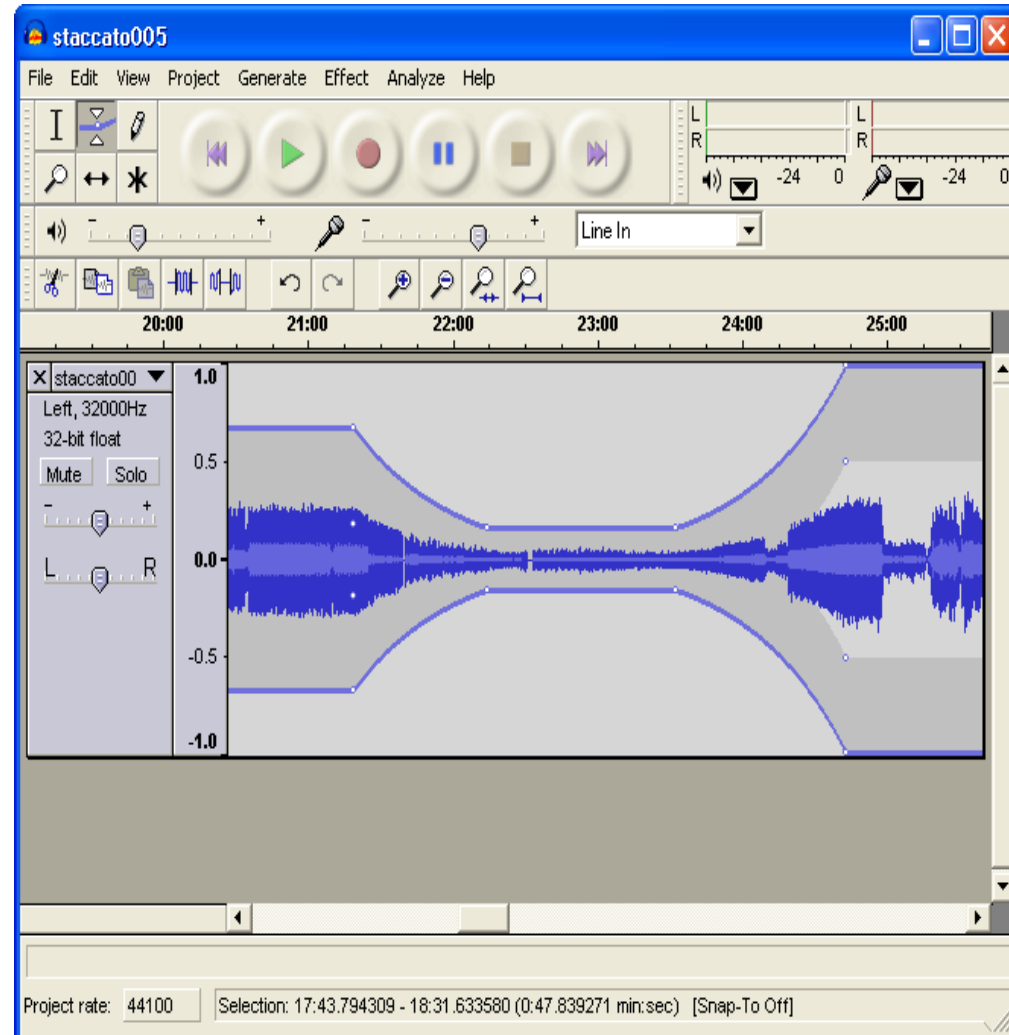
■ Tasks:

1. **Digital Faction** (Premier, Word, Audacity or Museum Box - <http://museumbox.e2bn.org/>)
2. **Critical evaluation:** Word document/Peer feedback using insert comment):



Speeches

- Podcasts: <http://www.how-to-podcast-tutorial.com/17-audacity-tutorial.htm>
- Oral tales
- Interviews
- Speeches
- Advertisements
- Performance poetry
- Raps
- News/Weather presentations





Global Projects

- <http://www.virtualclassroom.org/index.html> - competition
- <http://www.epals.com/projects/info.aspx?DivID=index> E.g. digital storytelling and global warming
- iLearn: <http://media.ilearn.org/home>
- **Global School Net: Cyberfair and Doors to Diplomacy:** <http://www.globalschoolnet.org/>

Project-based Learning

- Connected to real world situations
- Prep *Knoxigation*
- [Yr. 7 world problems](#)
- Yr. 8 *Minecraft* and sustainability
- Yr. 9 world problem
- Yr. 10 Action learning projects







Online Gaming

- [Develop](#) a low energy, sustainable city using *Minecraft*
- Inter-disciplinary
- Pre and post survey
- Deadlines and challenges
- Teams of three
- Flip Learning model
- City design and a [report](#)



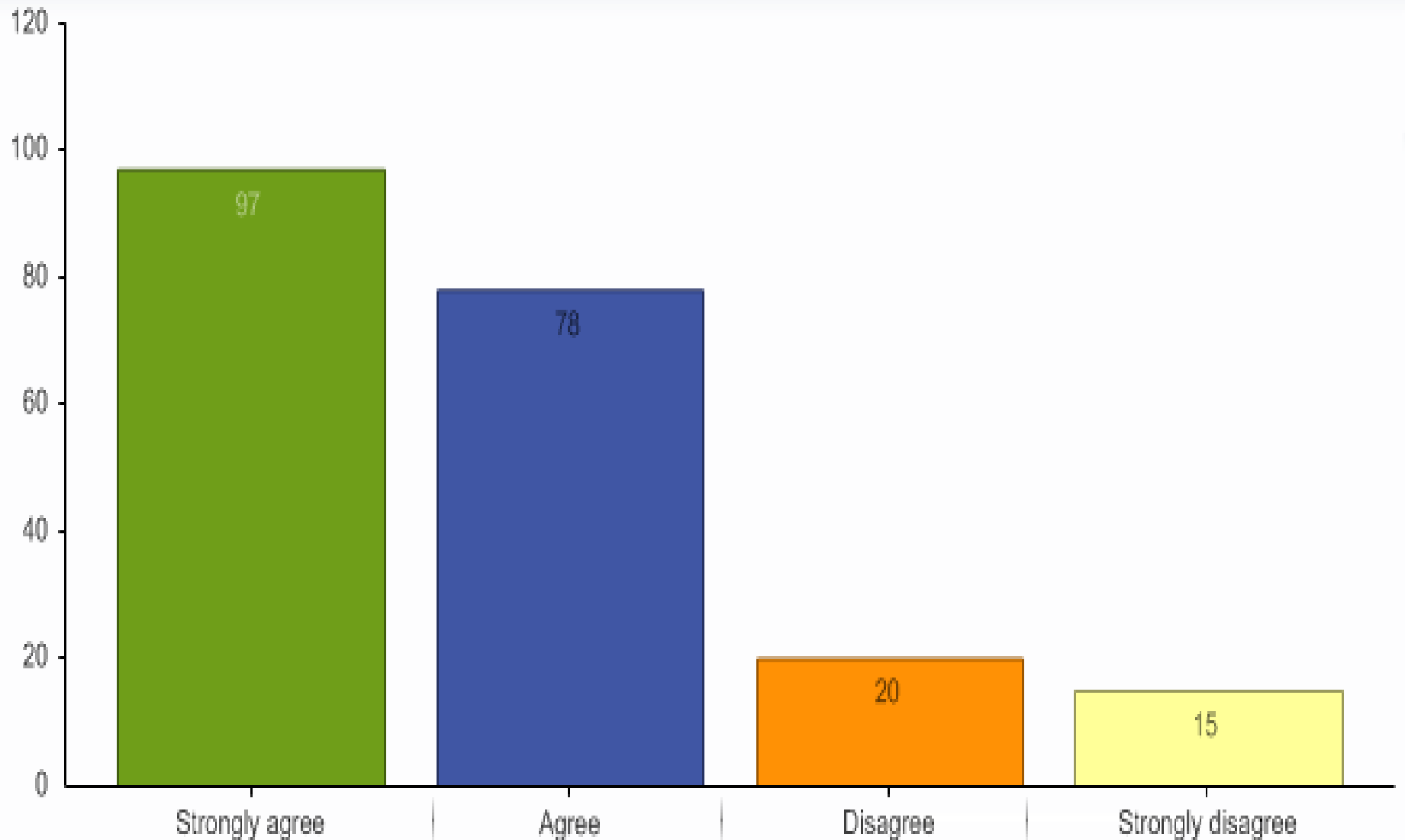
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- *“Games offer a context for problem-solving with immediate feedback, and often involve social interaction that can reinforce lessons learned” (2009, Salen)*
 - *“video games can stimulate learning of facts and skills such as strategic thinking, creativity, cooperation and innovative thinking, which are important skills in the information society” (2009, Dutch Government report).”*

Online Gaming

'Creativity typically involves problem solving, using your imagination and critical thinking skills. In terms of the actual assessment task there was lots of creativity involved such as using your imagination to design the sustainable city and critical thinking skills to mine and use the resources to build the city' (Yr.8 student).



Do you think computer games could be used in class to improve your creativity skills?



Student Voice

1. Student involvement in school and community development.
2. Students as researchers and co-enquirers – Action Research Projects.
3. Students making significant inputs to teaching and learning, and organisational decision-making.
4. Student Future Think Tank working alongside the executive.



Sites to Visit

- <http://gamesined.wikispaces.com/>
- <http://q2l.org/>
- <http://slav.global2.vic.edu.au/category/gaming/>
- <http://www.theday.co.uk/technology/gamification-can-videogames-change-the-world>
- http://www.ted.com/talks/seth_priebatsch_the_game_layer_on_top_of_the_world.html
- http://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world.html
- <http://www.timrylands.com/html/inspire.html>
- <http://novemberlearning.com/team/alan-november/>

Over to you...

- Share a task that uncovers the learning.
- Why makes it a quality task?



*“Assessment should be first and foremost for the learner’s sake, designed and implemented to provide useful feedback to the learner on worthy tasks to make improved performance and ultimate mastery more likely”
(Wiggins, 2006).*

The Power of Feedback in School Settings

John Hattie (2003)

Feedback directed to the 'self'
(e.g.: "You are a great student").
'Rarely does it enhance
achievement or learning'.

Increases the
ability to
accommodate
feedback and
create internal
feedback...

Level 3: Self-regulation

Relates to greater skill in self
evaluation/self regulation

Feedback at this
process level
appears to be
more effective
than at the task
level for enhancing
deeper learning'

Level 2: Process

Aimed at the processes used to create
the product/task

'Having correct
information is a
pedestal on
which processing
and self-
regulation can be
effectively built.'

Level 1: Task

'corrective feedback'
information focussed

Pedestal of
feedback

Most feedback
remains task
focused

Peer Assessment

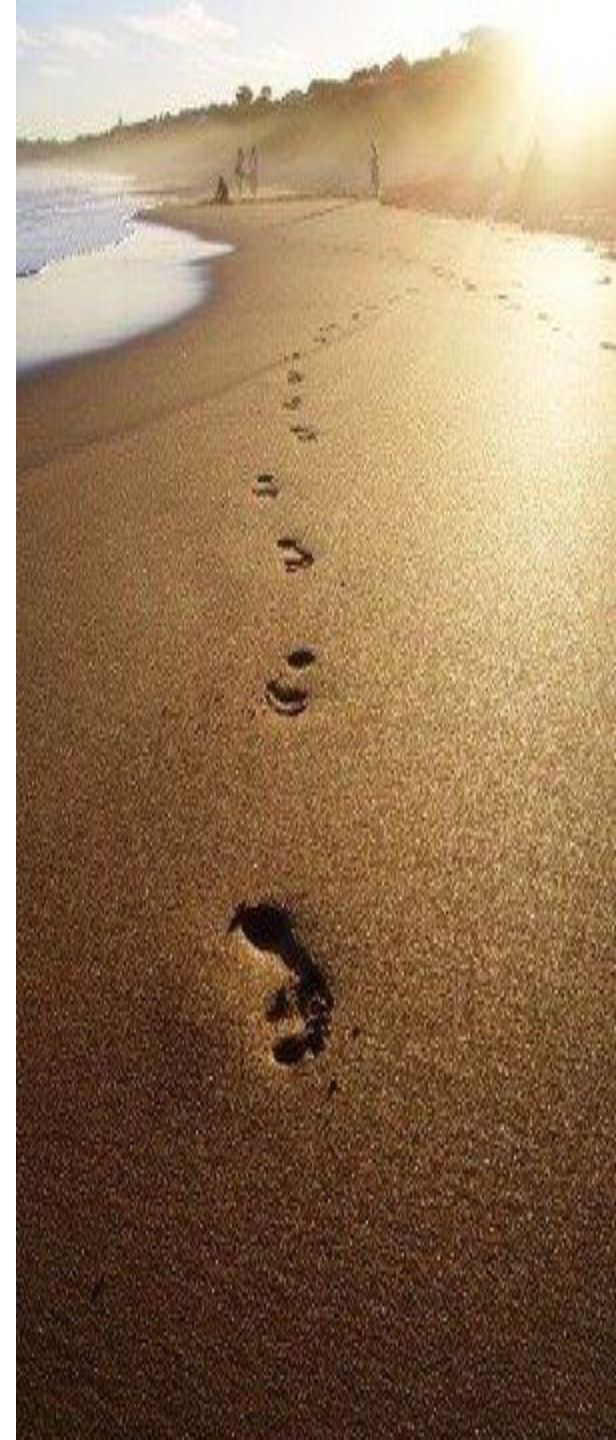
- *“When students are more active participants in the whole process, then feedback is likely to be most useful to students’ learning” (Hattie & Timperley, 2007).*
- *“When students get to see other students’ work it deepens understanding of the learning goals” (Nicol, 2008)*



*‘When learning something challenging we don’t always get it right the first time. **Errors are inevitable.** Indeed they are helpful; learning is a **trial and error process**, with success achieved by recognising errors and correcting them to obtain a closer approximation to the final goal. Students should not be crippled by errors, instead they must take **responsibility for correction**’ (Petty, 2009).*

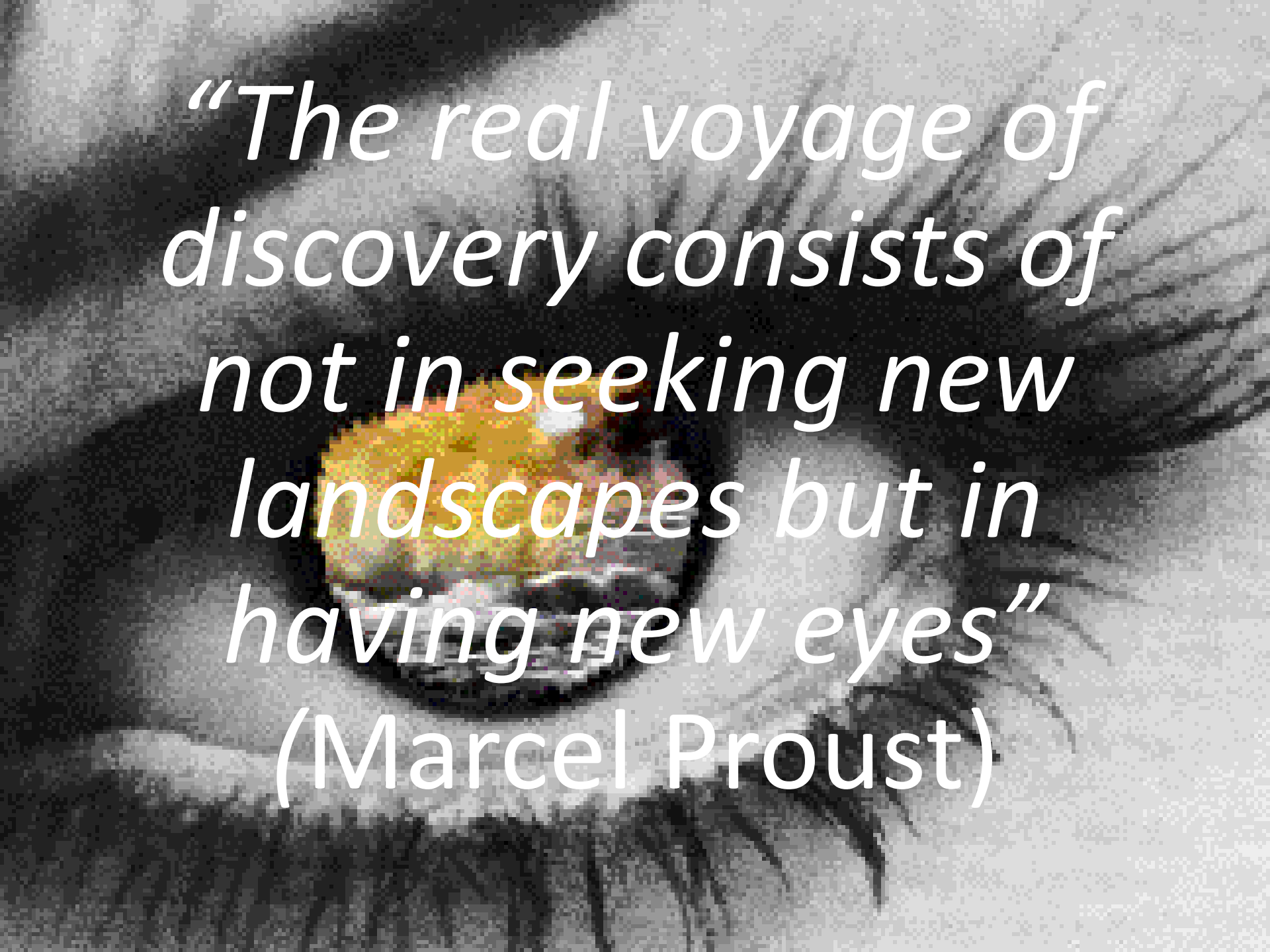
Journey to Self & Peer assessment

- **Edmodo:** <http://edmodo.com>
- **Google Docs:** <http://google.com/educators/tools.html>
- Invite diagnostic peer and self assessment by using a rubric and marking scheme that has been clearly explained to the students.
- Pairing and sharing
- Require students to design the marking criteria.
- Blogs and wikis



The background of the image is a vibrant sunset or sunrise. The sky is filled with swirling, textured clouds in shades of orange, yellow, and red. Below the horizon, which is visible in the middle ground, there is a body of water reflecting the sky's colors. In the foreground, a dark, silhouetted fence with vertical posts runs across the frame. The overall scene is atmospheric and colorful.

[http://unswi
ct.wikispace
s.com/](http://unswi
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s.com/)



*“The real voyage of
discovery consists of
not in seeking new
landscapes but in
having new eyes”
(Marcel Proust)*